

Adaptation Patterns of Bugis Diaspora Village Architecture: *Sulapa Eppa*' Philosophy and Function-Form-Meaning-Context Theory

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Abstract

The traditional Bugis villages could be found in some places outside their original land in South Sulawesi. These villages can be referred to as the Bugis diaspora villages. Most of these villages can be identified through its architecture of the houses that have particular architectural character, called traditional Bugis house and it is considered as vernacular architecture. This situation indicates that Bugis vernacular architecture can adapt to the new environment and the globalization. The objective of this paper is to find out the adaptation pattern of the traditional Bugis Village in Pulau Kelapa Dua, Kabupaten Administrasi Kepulauan Seribu. The method consists of observing and recording all the physical and cultural material which then was analyzed based on the function-form-meaning-context theory and the Bugis' philosophy of life and existence called *sulapa eppa*'. There were some previous studies about Bugis traditional architecture, but the exploration of *sulapa eppa*' and the theory of function-form-meaning-context as the point of departure to reveal the adaptation pattern is still scarce. The finding of this study showed that Bugis architecture is very adaptable especially in responding to the context of new place and a new era, but the most basic of Bugis existence derived from the *sulapa eppa*' philosophy is still preserved.

Keywords: Adaptation, Bugis Architecture, *Sulapa Eppa*', Vernacular, Village.

Introduction

Traditional Bugis villages could be found in some places outside their original lands in South Sulawesi. These villages can be referred to as the Bugis diaspora villages. Most of these villages can be identified through the architecture of the houses that have particular architectural character, called traditional Bugis house and it is considered as vernacular architecture. This situation indicates that Bugis vernacular architecture can adapt to the new environment.

Understanding the adaptation patterns of Bugis architecture in their new environment would be an advantage for sustaining the vernacular architecture which is very important in the global era. Since architecture is shaped not only by function and physical environments but also by social and cultural factors (Rapoport, 1969), Bugis socio-cultural approach used as the starting point to find out architectural adaptation by relating it with the aspects of architecture: function-form-meaning (Capon, 1999, Salura, 2015). Capon, (1999) proposed that architecture consists of 3 primary aspects: form, function, meaning, and 3 secondary elements: construction, context and will. Salura (2015) proposed that the main aspects of architecture are: function, form, and meaning.

The aim of this study is to find the architectural adaptation patterns in the Bugis diaspora villages. The study commenced by exploring the relation between the theory of architecture proposed by Capon (1999) and Salura (2015) and the *sulapa eppa*' philosophy. There are some previous studies about Bugis architecture, but the exploration of *sulapa eppa*' as the point of departure is still scarce.

The *Sulapa Eppa'* Philosophy

As mentioned previously, the Bugis sociocultural approach used in this study is the *sulapa eppa'* philosophy. The *Sulapa Eppa'* means rhombus rectangular that consists of four corners (*eppa'* means four), symbolizing a lot of meanings in the life of Bugis people. It is symbolizing microcosmos in human body and also macrocosmos or universe as the living place.

In Fig. 1, the circle is symbolizing the universe which is divided into three vertical zones

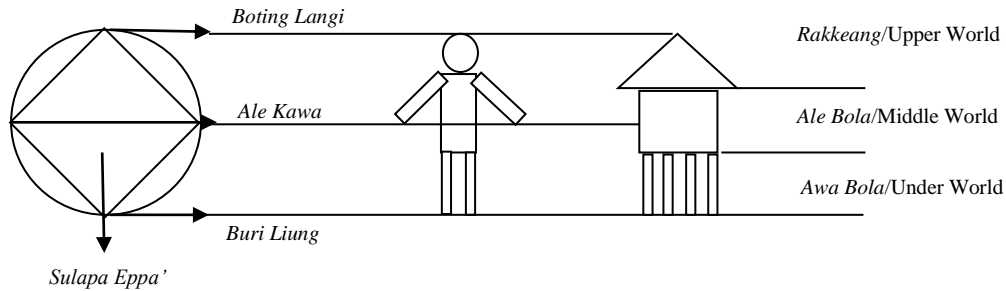


Fig. 1: *Sulapa Eppa'*, Symbol of Cosmology in Bugis Culture
Elaborated from (Kahdar, 2010)

called (1) *Boting Langi*, means upper world, the place of God, heaven; (2) *Ale Kawa*, means middle world, the living place, and (3) *Buri Liung*, means underworld, place of death and bad things. This universe concept is also applied to the human body, the head is considered as upper world, the body is middle world, and the legs are under world. In architecture, the Bugis traditional house also consists of those three vertical zones, that are *Rakkeang*, a sacred space in the attic (under the roof) for Dewi Sri the rice Goddess. *Rakkeang* was used to keep the paddy as the staple food. The other two zones are *Ale Bola*, the living space, and the *Awa Bola*, the space for shed and animals under the house. The shape of Bugis traditional houses is stilt house.

The symbol of *Sulappa Eppa'* philosophy has originated from *aksara lontara*, Bugis alphabetical

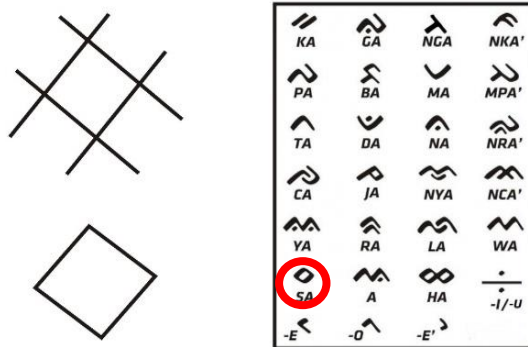


Fig. 2: *Aksara Lontara 'sa'* and the Symbol of *Sulapa Eppa'*.
Source: (Pangnerang, 2015)

system that used to be written in palm leaves called *lontar*. The letter symbol is /s/=sa which means /esw/=seua or 'one' (Fig. 2). This symbol has a lot of meaning such as God, human, sky, and earth (Mahbud, 2008). *Sulapa Eppa'* can also be called classification four that is used to symbolize four elements of nature such as wind, water, fire, and earth. Each element is symbolized by colors, yellow for wind, white for water, red for fire, and black for earth (Mahbud, 2008). It is also used as a symbol of the four points of the compass, such as North, South, East, West (Mahbud, 2008).

Aspects of Architecture

Aspects of Architecture can be categorized as primary categories and secondary categories that are in pairs (Capon, 1999). The pairs are Form-Construction, Function-Context, and Meaning-Will (Fig. 3).

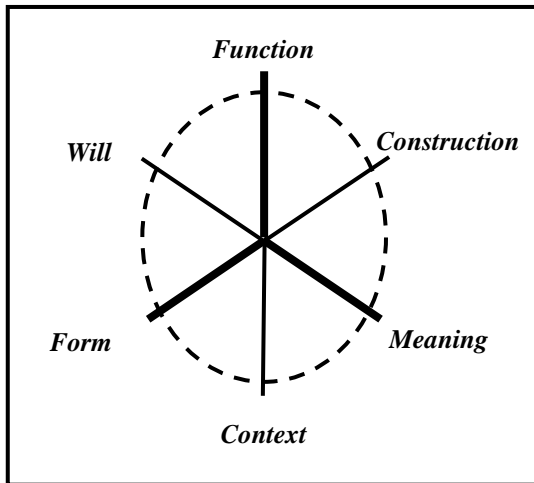


Fig. 3: Primary and Secondary Categories of Architecture

Source: (Capon, 1999)

The primary categories are Form-Function-Meaning, and the secondary categories are Construction-Context-Will. This theory is a critic of Vitruvius theory of architecture, but each category was developed from the Vitruvian category. While Salura, (2015), proposed a circular relation of three most important aspects of architecture, function-form-meaning. The function is equal to activities that has zoning structure that turns into spatial form which has enclosure vertically and horizontally. This spatial form is expressing its function or meaning through its appearance and will be read and interpreted by its observers. The observers' interpretation is affected by its natural and cultural context, and the context affected the function, and it keeps rotating (Fig. 4).

Based on those theories, this study proposed the relation between the local philosophy of Bugis people, the classification four, and the theory of architecture function-form-meaning-context. There are three most important aspects in architecture:

function-form-meaning (Capon, 1999, Salura, 2015). The context that was considered as the second category (Capon, 1999), in the case of Bugis diaspora villages, is the most important element in shaping architecture. Natural and cultural environment as part of context becomes very important in this case so that the model put the context in as the fourth element that affects the function, form, and meaning. This model is called classification four derived from the Bugis *Sulapa Eppa'* philosophy, as seen in Fig. 5.

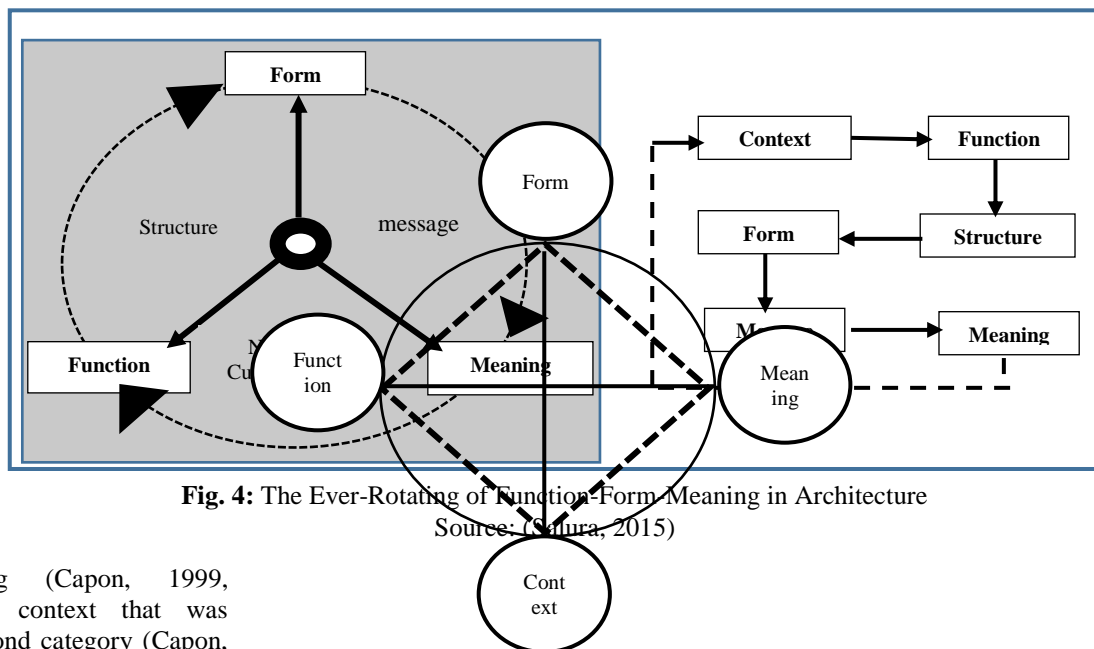


Fig. 4: The Ever-Rotating of Function-Form-Meaning in Architecture

Source: (Salura, 2015)

Fig. 5: Model of Classification Four *Sulapa Eppa'* and Architectural Theory

Material and Methods: Case Study

The case study is a Bugis village at Pulau Kelapa Dua (Kelapa Dua Island). Kelapa Dua Island is one of the settlement islands in Kepulauan Seribu (Thousand Islands) District, DKI Jakarta Province, Indonesia. It is located at Java Sea in the North of Jakarta. According to the history, the Bugis people moved to Kelapa Dua Island since 1982 from Genteng Island. Kelapa Dua Island is a small island with only 1.9 ha area elongated from East to West. At that time, there were only 50 knocked down stilt houses brought from Genteng Island, and the houses were re-assembled together by the people. Now

the numbers of houses have increased to more than 100, many of them have changed to landed modern houses. Two houses were chosen as purposive samples, the first house represents the original Bugis house with minor changing, and the second house represents the landed brick house that has major changes from its original form.

Stages of the Research

The first stage of this research was done by observing and recording the physical data obtained from the case study. The physical records were made based on the relations between the four aspects of architecture of the model of classification four. The second stage was done by interviewing the occupants and also the people of the village especially the one who is considered as the most important figure. The interviews were conducted to investigate the relations between their culture and activities as the background of the architectural form. The third stage was then analyzing all the data collected using the model of classification four of *sulapa eppa'* and architectural theory.

Result and Discussion

The data obtained from the two houses in the case study was analyzed by looking at the alteration in the four aspects of architecture that are form, function, meaning and context as follows:

Alteration in Form

The first house owned by Mr. Bolong, still maintains its original form, a timber house on stilt with three bedrooms on the west side (Fig. 6 and 7). It also has a ritual pole called *possi bola* as the most important ritual element in Bugis architecture, even though it is covered by bedroom partition. The kitchen and the bathroom have been moved to the attached landed brick building at the back side of the stilt house (Fig. 7 and 8). It is not considered as the main house which still keeps its originality. The roof shape has also been altered from the saddle roof with gable on the original Bugis house to the shield like (*limas*) roof as a response to the strong winds at the Kelapa Dua Island. The material of the roof frame is still the same as the original house that is made of timber, but the roof cover uses asbestos instead of sago palm leaves.

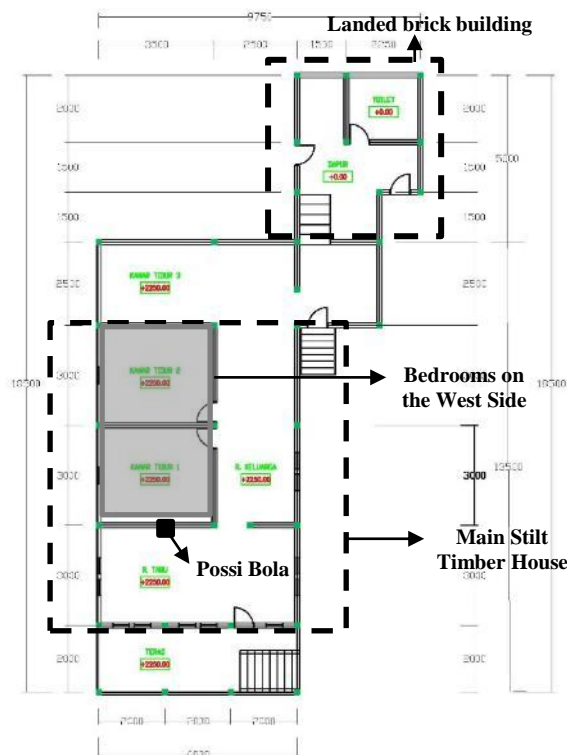


Fig. 6: First House Plan



Fig. 7: Elevation



Fig. 8: Landed Brick Building for Kitchen and Bathroom

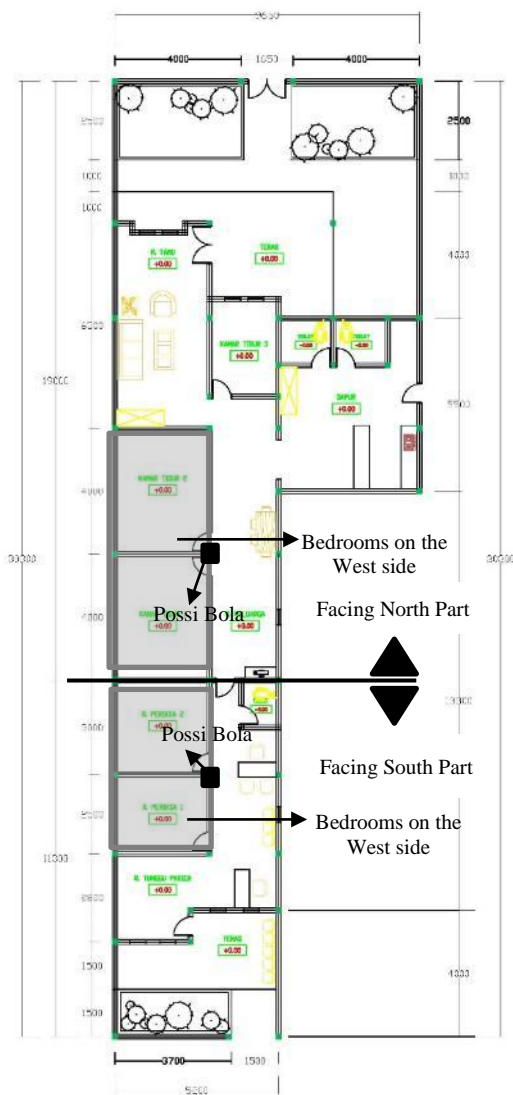


Fig. 9: Second House Plan

Alteration in Function

Space function according to 3 zones of the houses is only the middle world zone that remains the same as a living space. The under world (*awa bola*) in the landed brick houses (second house) had disappeared, while in the first house the function is still the same as a storage. The upper world (*rakkeang*) has no function in both houses. In the first house, the *rakkeang* is not covered by ceiling but in the landed brick house, there is ceiling covering the attic. The landed brick house which facing the South has been functioned as public health building. The owner rented it to the government. This indicates the change of meaning of the house to the economic value instead of a living place.

Alteration of Meaning

The *possibola* still remain in both houses. In the first house that is still surviving its original architecture, the *possibola* is made of wood and it can be seen from the inside of the bedroom and it also functioned as the frame of bedroom partition. In the second house, the landed brick house, the *possibola* merged with the brick wall of the bedroom, so it cannot be seen. Both owners are aware of the importance of the *possibola* for the house because they followed their ancestors. They do not treat

The second house owned by Mr. H. Usman, has been changed totally to landed brick house. The house was originally two stilt houses. Because of the poor condition of the houses, it was then rebuilt as a landed brick house. The first house that had been renovated is the house on the North part (Fig. 10), and the next is the house facing to the South or facing to the main road (Fig. 11). The difficulties in finding wood and timber material was the main reason of vanishing the traditional Bugis House. There are some advantages of building landed brick house: (1) the materials are easy to find and cheaper than the timber; (2) the durability of brick house is much better than the wood house; (3) the brick house is considered as more suitable with the current lifestyle.

Even though the house has changed to the new look and material, the room arrangement is still the same with the original house (Fig. 9). All the bedrooms are on the West side of the house, whether it is facing North or South. Both houses still keep their *possibola*, but the materials are not timber anymore.



Fig. 10: Second House North Elevation



Fig. 11: Second House South Elevation

the *possi bola* as sacred pole anymore, because they never do any rituals on the *possi bola* like their ancestors did in the past. This indicates that there is an alteration in the meaning of the *possi bola* to the owners.

Apart from the alterations in the meaning of the *possi bola*, the deep meaning is still kept unconsciously, as a symbol of the divinities and the existence of human being, as the centre of the house is to keep the family safe and prosperous. This is proved by the existence of *possi bola* in both houses, even though the material has changed and it cannot be visually seen especially in the landed brick house.

Alteration of the Context

The context in this case consists of the natural environment and the cultural environment following the change of time. The natural environment influenced the orientation and configuration of the village. The configuration of the village is following the shape of the island so it has one main road elongated form the East to the West of the Island. The houses are facing to the main road so the orientation of the houses is to the North and South. On the other hand people also changed the environment to fulfill their needs by doing reclamation to the north side of the island so they can build more houses for the increase of population.

People also change their environment and houses following the current situation of economic and cultural development. This situation is proved by the development of landed brick houses as the response of the economic value of the building materials (expensive timber, brick and concrete durability) and the current lifestyle.

Conclusions

Based on the previous discussion, it can be concluded that:

1. The relation between Function-Form-Meaning-Context and Bugis Phylosophy of *Sulapa Eppa* is suitable to read the architectural adaptation especially in Bugis diaspora village that has to adapt to the context of environment.
2. Though the Bugis architecture is very flexible to adapt to new environment and even to change, there is still one important thing that still exists, the *possi bola*, the ritual pole of the house, symbolizing the divinities and existence of human being, the center of the house to keep the family safe and prosperous.

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